

## CLAIMS

What is claimed is:

1. A method for providing a secured data update, the steps comprising:

inserting an authorization medium into a data loader, said authorization medium comprising an authorization list;

establishing a connection between said data loader and an installation target;

transmitting said authorization list to said installation target;

determining whether a serial number stored within said installation target matches a serial number stored within said authorization list; and

if a match was found in said determining step, transmitting to said data loader indicia for installation to proceed.

2. The method of claim 1, wherein if said determination step did not indicate a match, determining whether a master serial number stored within said installation target matches a serial number stored within said authorization list, and if a match occurs, transmitting to said data loader indicia for installation to proceed.

3. The method of claim 1, wherein said authorization medium is selected from the group consisting of 3.5 inch floppy diskettes, CD-ROMs, DVDs, DVD-ROMs, Bernoulli-type disks, and nonvolatile semiconductor-based memories.

4. The method of claim 1 wherein said authorization list is decrypted by said data loader.

5. The method of claim 1 wherein said authorization list is decrypted by said installation target.
6. The method of claim 1 wherein said authorization list is created by a software vendor, said authorization list comprising one or more authorized serial numbers.
7. The method of claim 6 wherein said authorization list is further comprised of a countdown datum.
8. The method of claim 7 further comprising the steps of:
  - reading said authorization list from said authorization medium;
  - decrypting said authorization list into a plaintext list;
  - reading a countdown datum from said plaintext list;
  - determining whether said countdown datum is greater than zero;
  - if said countdown datum is greater than zero, performing the steps of:
    - receiving a customer serial number;
    - adding said customer serial number to said plaintext list; and
    - decrementing said countdown datum in said plaintext list;
  - encrypting said plaintext list into a second authorization list; and
  - overwriting said authorization list on said authorization medium with said second authorization list.

9. A digital storage medium having computer-executable instructions stored thereon, wherein said computer-executable instructions are operable to execute the method of claim 2.

10. A digital storage medium having computer-executable instructions stored thereon, wherein said computer-executable instructions are operable to execute the method of claim 8.

11. The method of claim 1, wherein the establishing a connection step is accomplished by electrically connecting said installation target to said data loader through an ARINC standard 429 data bus.

12. The method of claim 1, wherein the establishing a connection step is accomplished by connecting said installation target to said data loader through a wireless interface.

13. The method of claim 1, wherein said data loader is configured to comply with a standard selected from the group consisting of ARINC 615, ARINC 615-3, ARINC 615-4, ARINC 615-A1 and 615-A2.

14. A method of providing a secured data update, the steps comprising:

- (a) establishing a connection between a data loader and an installation target;
- (b) inserting a software installation medium into said data loader;
- (c) reading software information from said installation medium;
- (d) transmitting said software information to said data loader;
- (e) repeating steps (b), (c) and (d) until software installation and transmission is completed;
- (f) inserting an authorization medium into said data loader;
- (g) reading and decrypting a countdown datum from said authorization medium; and
- (h) if the value of said countdown datum is greater than zero, transmitting indicia to the installation target directing the installation target to validate data load, otherwise, transmitting indicia to the installation target to invalidate data load.

15. The method of claim 14, further comprising the steps of:

- (g) decrementing said countdown datum by the value of one to comprise an updated countdown datum;
- (h) encrypting said updated countdown datum; and
- (i) overwriting said countdown datum on said authorization medium with said encrypted updated countdown datum.

16. The method of claim 14, further comprising the step of reverting to a previous software installation in the installation target if said countdown datum is not greater than zero.

17. A digital storage medium having computer-executable instructions stored thereon, wherein said computer-executable instructions are operable to execute the method of claim 14.

18. A digital storage medium having computer-executable instructions stored thereon, wherein said computer-executable instructions are operable to execute the method of claim 16.

19. The method of claim 14, wherein the establishing a connection step is accomplished by electrically connecting said installation target to said data loader through an ARINC standard 429 data bus.

20. The method of claim 14, wherein the establishing a connection step is accomplished by connecting said installation target to said data loader through a wireless interface.

21. The method of claim 14, wherein said data loader is configured to comply with a standard selected from the group consisting of ARINC 615, ARINC 615-3, ARINC 615-4, ARINC 615-A1 and 615-A2.

22. The method of claim 14, wherein said software installation medium is selected from the group consisting of 3.5 inch floppy diskettes, CD-ROMs, DVDs, DVD-ROMs, Bernoulli-type disks, and nonvolatile semiconductor-based memories.